TABLE 2.—*Tornadic winds and possible tornadoes* [1]

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Year
ALABAMA:													
Number	1	0	0	0	0	0	0	0	0	0	0	0	1
Deaths	0												0
Injuries	0												0
Damage ($\times$1,000)	(2)												(2)
COLORADO:													
Number	0	0	0	0	0	0	0	1	0	0	0	0	1
Deaths								0					0
Injuries								0					0
Damage ($\times$1,000)								(2)					(2)
GEORGIA:													
Number	0	0	0	1	0	0	0	0	0	0	0	0	1
Deaths				0									0
Injuries				6									6
Damage ($\times$1,000)				(2)									(2)
INDIANA:													
Number	0	0	0	0	0	0	1	0	0	0	0	0	1
Deaths							3						3
Injuries							0						0
Damage ($\times$1,000)							50.0						50.0
IOWA:													
Number	0	0	1	0	0	0	0	0	0	0	0	0	1
Deaths			0										0
Injuries			0										0
Damage ($\times$1,000)			5.0										5.0
MICHIGAN:													
Number	0	0	0	0	0	0	0	2	0	0	0	0	2
Deaths								0					0
Injuries								7					7
Damage ($\times$1,000)								50.0					50.0

TABLE 2.—*Tornadic winds and possible tornadoes*—Continued

State	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Year
MINNESOTA:													
Number	0	0	0	0	0	0	0	1	0	0	0	0	1
Deaths								0					0
Injuries								2					2
Damage ($\times$1,000)								(2)					(2)
MISSISSIPPI:													
Number	0	0	0	0	1	0	0	0	0	0	0	0	1
Deaths					0								0
Injuries					25								25
Damages ($\times$1,000)					25.0								25.0
NEW JERSEY:													
Number	0	0	0	0	0	0	1	0	0	0	0	0	1
Deaths							0						0
Injuries							0						0
Damage ($\times$1,000)							25.0						25.0
PENNSYLVANIA:													
Number	0	0	0	0	0	0	1	0	0	0	0	0	1
Deaths							0						0
Injuries							0						0
Damage ($\times$1,000)							100.0						100.0
UNITED STATES:													
Number	1	0	1	1	1	0	3	4	0	0	0	0	11
Deaths	0		0	0	0		3	0					3
Injuries	0		0	6	25		0	9					40
Damage ($\times$1,000)	(2)		5.0	(3)	25.0		175.0	50.0					255.0

[1] These storms may or may not be classified as tornadoes when final study is made.
[2] Several hundred dollars.
[3] Several thousand dollars.

NORTH ATLANTIC TROPICAL DISTURBANCES OF 1938

By WILLIS E. HURD

[Weather Bureau, Washington, January 1939]

The hurricane season of 1938 in North Atlantic tropical waters lasted for 3 months, or from about the 10th of August until the 10th of November. Of the eight disturbances charted, one was of such slight intensity that it did not cause winds of gale force; two caused gales not exceeding 8 or 9 in force; one attained local force of 11 on 1 day; one attained hurricane force in local squalls on 1 day; and three may be classed as true hurricanes, among them one being of long sustained, terrific energy which resulted in a major disaster on September 21 to Long Island and a considerable part of New England, where in the neighborhood of 600 lives were lost and property to the value of at least a quarter billion dollars was destroyed. This was one of the few hurricanes of record to carry heavy destruction into the New England states.

Five of the disturbances were shallow, in that their lowest reported central barometer readings did not fall to 29.50 inches; in two of the hurricanes the barometer fell below 29 inches, but in that of September central pressures were near or below 28 inches during most of its charted course.

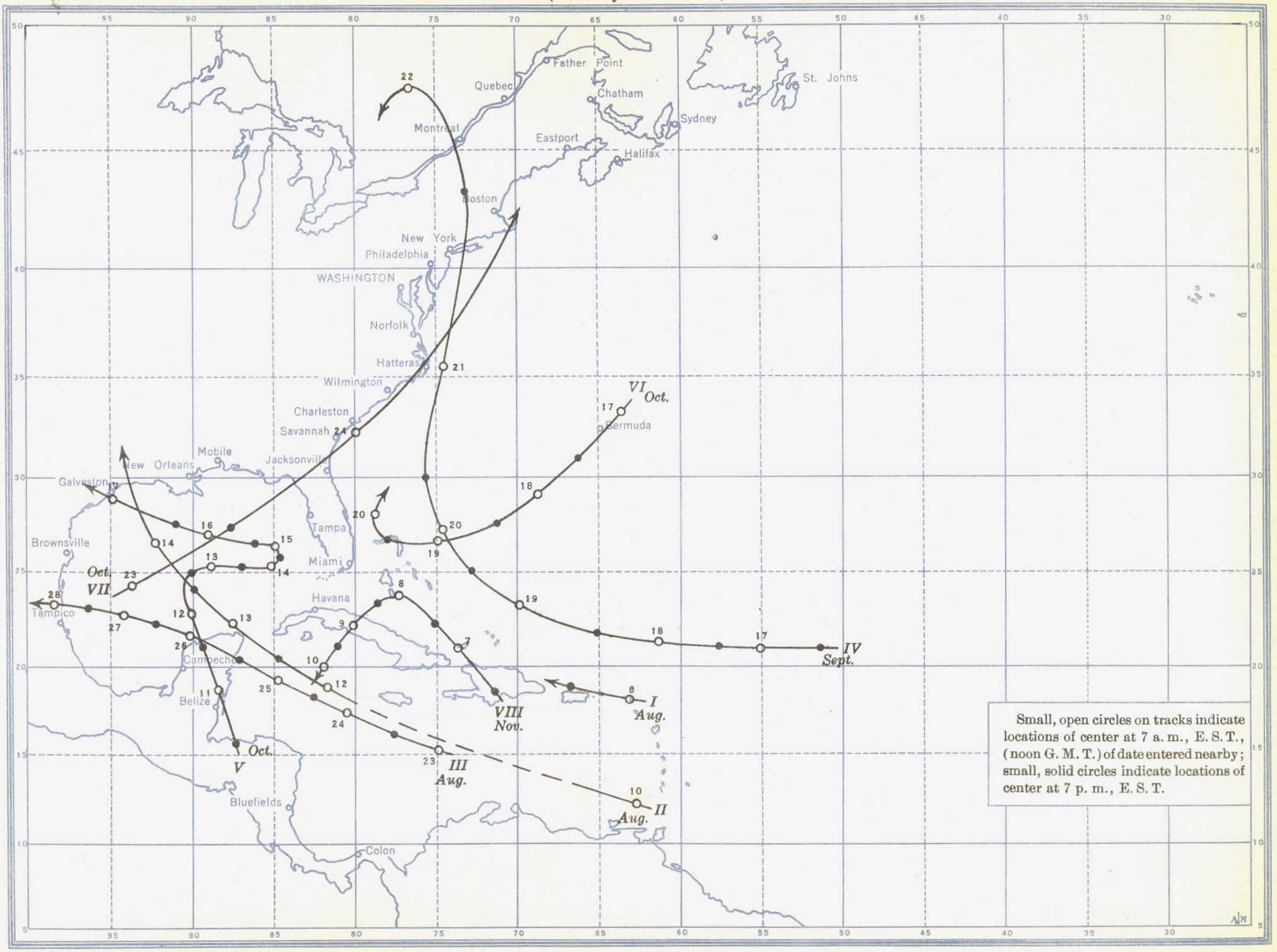
Economically, exclusive of the New England hurricane, damage resulting from the 1938 disturbances was comparatively small, amounting perhaps to slightly more than a quarter million (estimated) dollars, of which the greatest part was done in southern Louisiana by the hurricane of August 9–14.

A synopsis of some of the more important features of the eight disturbances of 1938 is given in the table herewith. Their tracks, numbered I to VIII chronologically, are shown in the accompanying chart.

Four of the disturbances of the year crossed the Gulf of Mexico, and the entire eight were associated in all or some portions of their paths with the general West Indian region. Three were unusual in path. The track of the disturbance of October 10–17 (V) was very erratic in the Gulf of Mexico; that of October 17–21 (VI) originated in the extratropics near Bermuda and took a southwesterly course toward Florida; that of November 6–10 (VIII) took first a northwesterly then a southwesterly course into the Caribbean Sea.

Paths of Hurricanes and Other Tropical Storms of 1938

(Plotted by J. H. Gallenne)



North Atlantic tropical disturbances of 1938

[Synopsis of tropical disturbances of 1938 (number of storm in table corresponds to number of track on accompanying chart)]

Storm	Date	Place where first reported	Coast lines crossed	Maximum wind velocity reported	Lowest barometer reported	Place of dissipation	Intensity	Remarks
I	Aug. 8–10 [1]	East of Puerto Rico.	None	Force 12, E., S. S. *West Isleta.*	29.58, Tortola Island	Florida Straits	Squalls of hurricane intensity on the 8th.	Damage slight (A).
II	Aug. 9–14	Windward Islands	Louisiana	95 miles, E., Grand Cayman Island.	29.56, Lake Charles, La.	Western Louisiana.	Hurricane	About a quarter million damage, mostly in Louisiana (A).
III	Aug. 23–28	Central Caribbean Sea.	Mexico	Force 12, S., S. S. *Agwistar;* 90 miles M. S. *Sama.*	28.92, S. S. *Agwistar*	Mexico	Hurricane	Some damage due to wind and storm tide (A).
IV	Sept. 16–22 [2]	Near 21° N., 52° W.	Connecticut	Force 12, by several ships and land stations.	27.85, S. S. *Carinthia*	Canada	Intense hurricane	Very damaging to New England. About 600 lives lost. Property damage $250,000,000 to $300,000,000 (B).
V	Oct. 10–17	Near Tela, Honduras.	Mexico, Texas	Force 9, NE., S. S. *El Isleo.*	29.41, S. S. *Wallace E. Pratt.*	Texas	Not of hurricane intensity.	No damage reported (C).
VI	Oct. 17–20	Near Bermuda	None	Force 6, 2 ships	29.78, near Florida coast.	North of Bahama Islands.	Slight	(C).
VII	Oct. 23–24	Near west-central Gulf of Mexico.	Florida; coast line of North Carolina and Massachusetts.	Force 8, NW., S. S. *Bertha Brovig.*	29.68, South Carolina coast before merging with northern LOW.	Merged with an extra-tropical LOW over New England.	Slight to moderate	(C).
VIII	Nov. 6–10 [3]	Haiti	Cuba	Force 11, N., S. S. *Maravi.*	29.54, Great Ragged Island, Bahamas.	Northwestern Caribbean.	Not of hurricane intensity.	Some damage due to wind and to wave erosion on the Florida east coast (D).

Complete reports of these disturbances may be found in the MONTHLY WEATHER REVIEW: (A) August 1938; 66: 240, 241. (B) September 1938; 66: 286, 288. (C) October 1938; 66: 325. (D) November 1938; 66: 378.

[1] Disturbance continued until the 10th, but there was no organized storm center except on the 8th.

[2] Some evidence of cyclonic circulation near 19° N., 37° W., on the 13th, but storm was not definitely charted until the 16th.

[3] Disturbed conditions occurred over the Leeward Islands as early as the 4th, but no organized storm center until the 6th.

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[RICHMOND T. ZOCH, *in Charge of Library*]

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